

STATEMENT OF BASIS

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0000086
to discharge to waters of the State of Louisiana.
AI No.: 5001 / Activity No.: PER20070001

THE APPLICANT IS: Sewerage and Water Board of New Orleans
8800 Claiborne Avenue
New Orleans, LA 70118

Facility
Carrollton Water Plant
8800 Claiborne Avenue
New Orleans, Orleans Parish

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Bonnie Wascom

DATE PREPARED: July 14, 2008

1. PERMIT STATUS

- A. LPDES permit – LA0000086
LPDES permit effective date: August 1, 2001
LPDES permit expiration date: July 31, 2006
- B. LWDPSP permit – NA
LWDPSP permit effective date: NA
LWDPSP permit expiration date: NA
- C. Date Application Received: November 30, 2007

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY – potable water treatment plant

This is an existing facility, which treats and distributes water from the Mississippi River. The facility utilizes coagulation, flocculation, sedimentation, disinfection and filtration to treat the surface water. The treated water is distributed to the city and to the on-site power plant. The clarifier underflow from the water treatment plant is discharged to the Mississippi River.

The on-site power plant treats the water it receives further by softening it with zeolite softeners. This softened water is used in the boilers of the power plant. The power plant discharges boiler blowdown wastewater to underground storm drains, thence to the 17th Street canal, and thence to Lake Pontchartrain. The discharge of boiler blowdown makes this facility ineligible for coverage under the Potable Water Treatment Plant General Permit (LAG380000). A small amount of softener regeneration wastewater is also intermittently released by the power plant, but

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monitoring will not be required because of its small volume and the distance it travels to Lake Pontchartrain.

The sanitary wastewater generated by this facility is collected and treated by the city sewage treatment plant.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: I
3. Wastewater Type: III
4. SIC code: 4941

C. LOCATION - 8800 Claiborne Avenue
New Orleans, Orleans Parish
Latitude +29° 57' 38", Longitude -90° 07' 35"

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: Clarifier Sludge/Underflow and Filter Backwash Wastewater

Treatment: None

Location: at the point of discharge from the clarifiers after commingling with the filter backwash wastewater and prior to mixing with other waters

Flow: 3.4 MGD

Discharge Route: by pipe to Mississippi River Mile 104.7

Outfall 002

Discharge Type: Boiler Blowdown

Treatment: None

Location: at the point of discharge from the boiler room prior to mixing with other waters

Flow: 0.010 MGD

Discharge Route: by pipe to underground storm drains, thence to the 17th Street Canal, thence to Lake Pontchartrain

NOTE: This facility does not require storm water permit coverage because it does not discharge regulated storm water. The facility's SIC code, 4941, is not listed in the storm water regulations at LAC 33:IX.2341.B.14.a-k and therefore the storm water runoff from the site is not classified as regulated industrial storm water.

The power plant releases 750 GPD of softener regeneration wastewater which combines with the boiler blowdown before traveling 0.67 miles through underground storm drains to the open 17th Street canal and an additional 4.3 miles before reaching Lake Pontchartrain. The estuarine waterbody to which the softener regeneration wastewater flows does not have a chloride standard assigned and no designated uses are assigned to subsegment 041302 that are affected by chlorides. In accordance with LAC

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33:IX.1113.C.2, which states "For estuarine and coastal marine waters subsegments in Table 3 that have no listed criteria (i.e. designated N/A), criteria will be established on a case-by-case basis using field determination of ambient conditions and the designated uses", chlorides limits and monitoring will not be required based on the small volume of the zeolite recharge water and the distance it travels to Lake Pontchartrain. No pollutants of concern are present in this release, so regulation is not required.

4. RECEIVING WATERS

STREAM – Outfall 001 – by pipe to Mississippi River Mile 104.7

BASIN AND SEGMENT – Mississippi River – Subsegment 070301

DESIGNATED USES -

- a. Primary contact recreation
- b. Secondary contact recreation
- c. Propagation of fish and wildlife
- d. Drinking water supply

STREAM – Outfall 002 – by pipe to underground canals, thence to the 17th Street Canal, thence to Lake Pontchartrain

BASIN AND SEGMENT – Lake Pontchartrain – Subsegment 041302

DESIGNATED USES -

- a. Primary contact recreation
- b. Secondary contact recreation
- c. Propagation of fish and wildlife

5. EXISTING EFFLUENT LIMITS

1. Outfall 001 – Clarifier Sludge/Underflow

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg; Daily Max (mg/l)	<u>Monitoring</u>
Flow (GPD)	Report: Report	Monthly
TSS	Report: Report	Monthly
Coagulants	Report: Report	Monthly
pH	6.0 - 10.0 s.u.	Monthly

6. PROPOSED EFFLUENT LIMITS

BASIS – See rationale below.

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7. COMPLIANCE HISTORY/COMMENTS

A. Compliance History

Since January 1, 2005 there are 3 inspections and 1 warning letter on file.

The inspection on September 14, 2005 was conducted in response to Hurricane Katrina. No discharges, spills, or environmental items of concern were noted.

The inspection on November 1, 2007 was conducted in response to a complaint. A drinking water line was leaking and was repaired on September 21, 2007.

The inspection on October 26, 2007 noted unpermitted discharges of boiler blowdown and softener regeneration wastewater, the permit was expired and a renewal application had not been submitted, and there was no pH meter calibration log. A follow up visit was conducted on November 1, 2007 to determine the locations of the discharge points for the unpermitted discharges.

A warning was issued on February 11, 2008 in response to the areas of concern noted in the inspection on October 26, 2007.

B. DMR Review/Excursions

39 DMRs were reviewed for the period of January 2005 – June 2008. The review revealed no exceedances.

8. ENDANGERED SPECIES

The receiving waterbody, Subsegment 070301 of the Mississippi River Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon species, which is listed federally as a threatened species. However, this type of discharge is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs to Brown. Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

The receiving waterbody, Subsegment 041302 of the Lake Pontchartrain Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

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9. 303 (d) LISTED WATERBODIES

Subsegment 070301, Mississippi River – From Monte Sano Bayou to Head of Passes, is not listed on LDEQ's Final 2006 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

Subsegment 041302, Lake Pontchartrain Drainage Canals in Jefferson and Orleans Parishes, are listed on LDEQ's Final 2006 303(d) List as impaired for pathogen indicators. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the potable water treatment wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated. The discharge from this facility does not include sanitary wastewater therefore; the discharge from this facility does not have the potential to contribute to the pathogen indicator impairments.

10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

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Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

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Rationale for Carrollton Water Plant

1. **Outfall 001 – Clarifier Sludge/Underflow and Filter Backwash Wastewater**

<u>Pollutant</u>	<u>Limitation*</u>	<u>Reference**</u>
	Mo. Avg: Daily Max	
Flow (MGD)	Report: Report	LAC 33:IX.2361.I.1.b; LAG380000
Coagulants Added (lb/day)	Report: Report	Similar discharges (BPJ); LAG380000
pH (s.u.)	6.0 - 10.0	Prior Permit (BPJ)
Treatment: None		

***Monitoring Frequency:** Based on a DMR review for the period of January 2005 – June 2008, a performance-based frequency reduction is granted for all parameters to once per quarter at the point of discharge from the clarifiers after commingling with the filter backwash wastewater and prior to mixing with other waters.

2. **Outfall 002 – Boiler Blowdown**

<u>Pollutant</u>	<u>Limitation*</u>	<u>Reference**</u>
	Mo. Avg: Daily Max	
Flow (GPD)	Report: Report	LAC 33:IX.2361.I.1.b; LAG480000
Temperature (°F)	-----: Report	Similar discharges (BPJ); LAG480000
pH (s.u.)	6.0 - 9.0	Similar discharges (BPJ); LAG480000
Treatment: None		

***Monitoring Frequency:** Once per quarter for all parameters at the point of discharge from the boiler room prior to mixing with other waters when discharging.

A temperature limit is not required because of the relatively low volume of the boiler blowdown, the distance to the receiving water, and the large volume of additional waters which will combine with the boiler blowdown before it reaches Lake Pontchartrain.

****Limits Justification:** For all parameters, the limits and monitoring frequencies are based on the general permit for potable water treatment plants (LAG380000) and the prior permit.

Note: The Potable Water Treatment Plant General Permit is not appropriate for this facility because the facility's treatment protocols and processes warrant continuation of the pH limit established in the permit issued by LDEQ in 2001. Also, the facility discharges boiler blowdown which is not a discharge type that is covered by the Potable Water Treatment Plant General Permit.

BPJ Best Professional Judgment
GPD Gallons per Day
MGD Million Gallons per Day
s.u. Standard Units

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NOTE:

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

Storm Water Pollution Prevention Plan (SWP3) Requirement

Discharges from this facility are not classified as industrial storm water per LAC 33:IX.2341.B.14. Therefore, the Storm Water Pollution Prevention Plan (SWP3) requirement is not included in this permit.

However, per LAC 33:IX.903.B, all above ground storage tanks with a capacity of 660 gallons for an individual container or 1320 for multiple containers, must have secondary containment and a Spill Prevention and Control Plan.